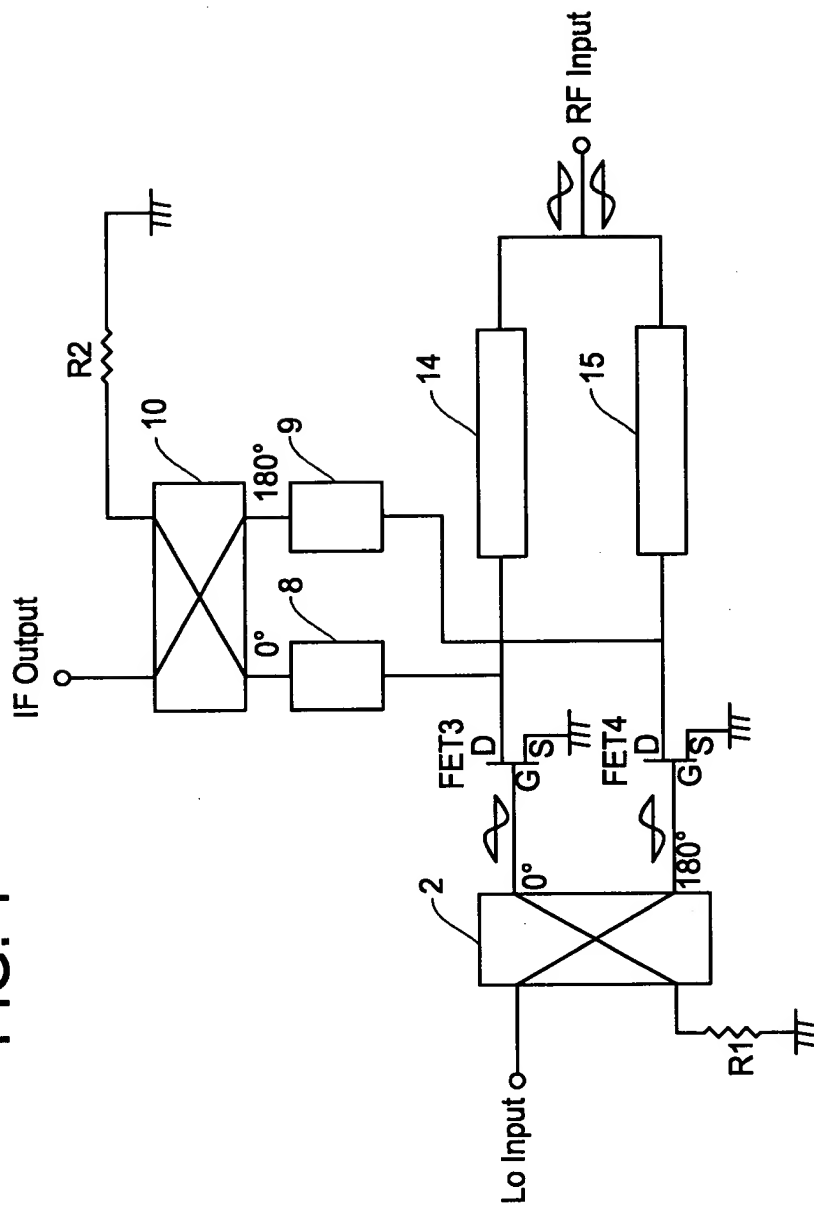


FIG. 1



**FIG. 2**

The diagram illustrates a balanced mixer circuit. It features two FETs, FET3 and FET4, each with a gate (G), drain (D), and source (S). FET3 is connected to a local oscillator input Lo (0°) and an intermediate frequency output IF (0°). FET4 is connected to a local oscillator input Lo (180°) and an intermediate frequency output IF (180°). The gates of both FETs are connected to a common RF input through quarter-wave lines (λ/4). The drains of both FETs are connected to a common RF output through quarter-wave lines (λ/4). The sources of both FETs are connected to a common ground. The circuit is shown within a rectangular boundary, with a dashed line indicating a center of symmetry.

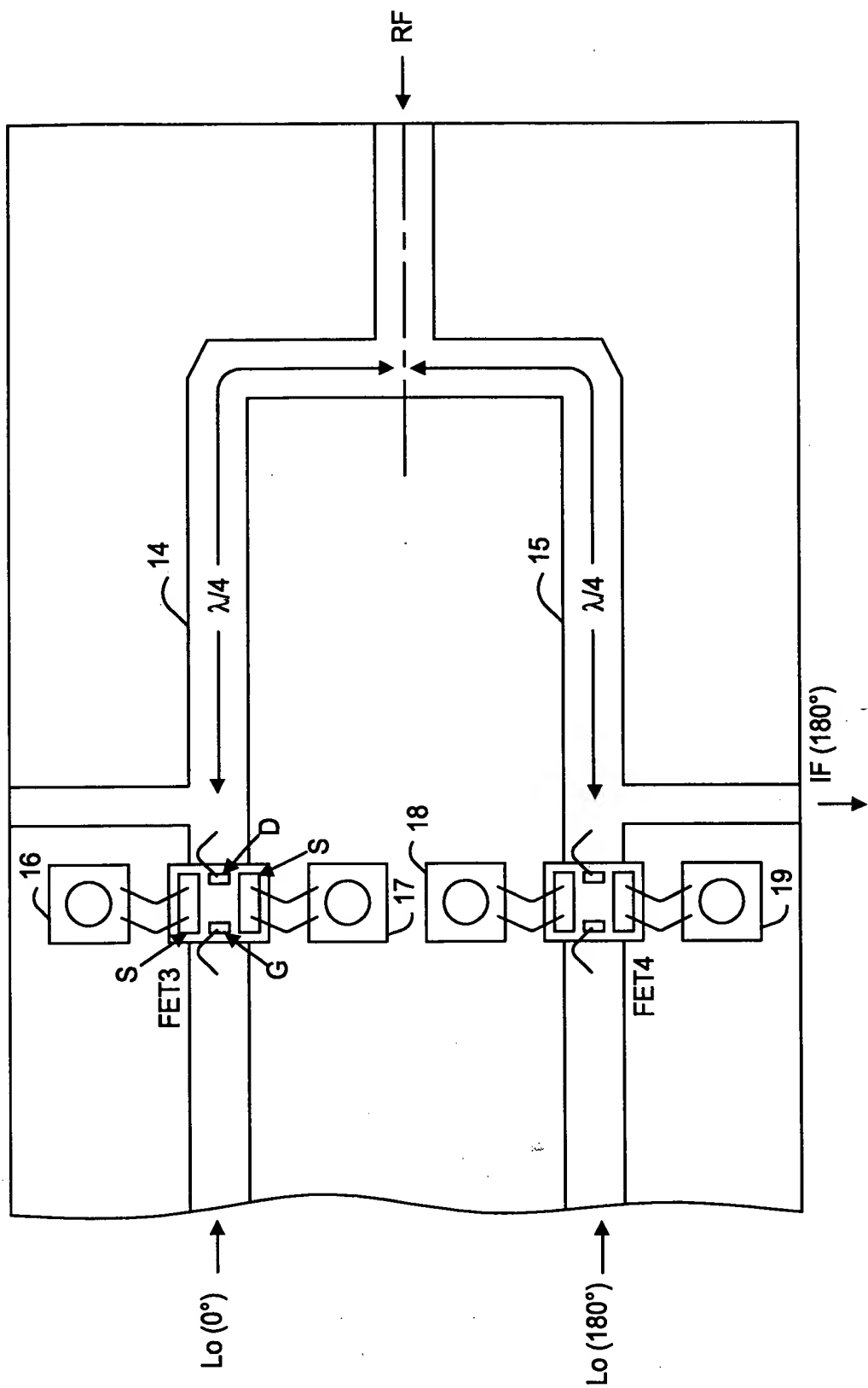


FIG. 3

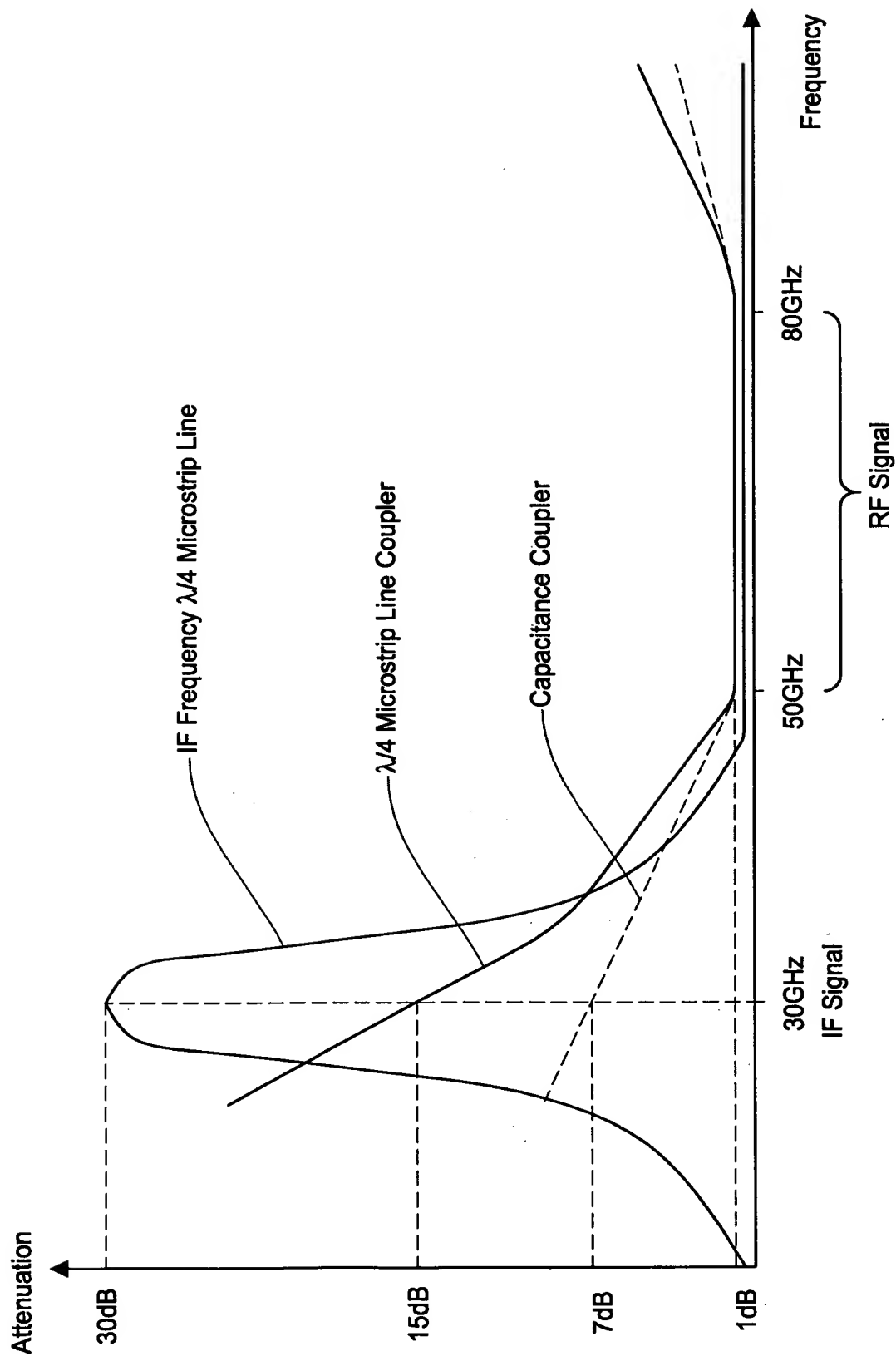


FIG. 4

FIG. 4

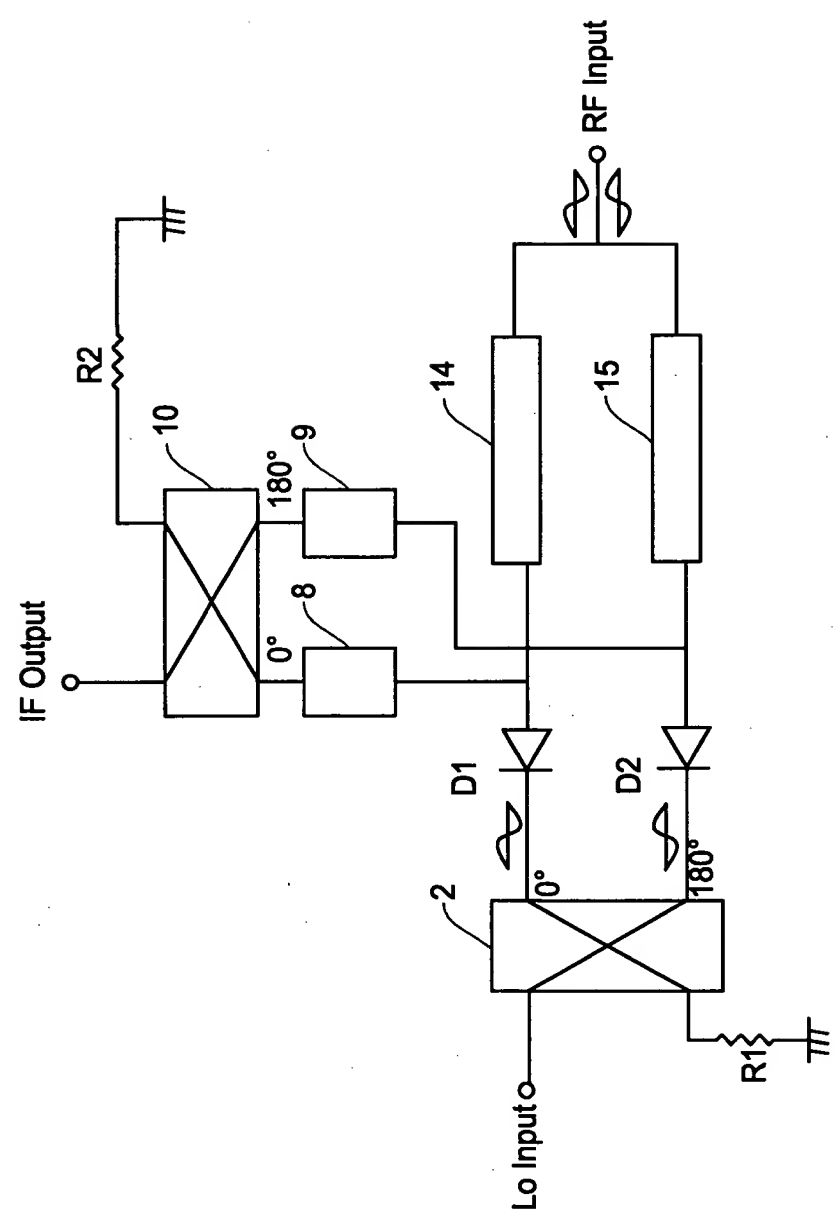


FIG. 5

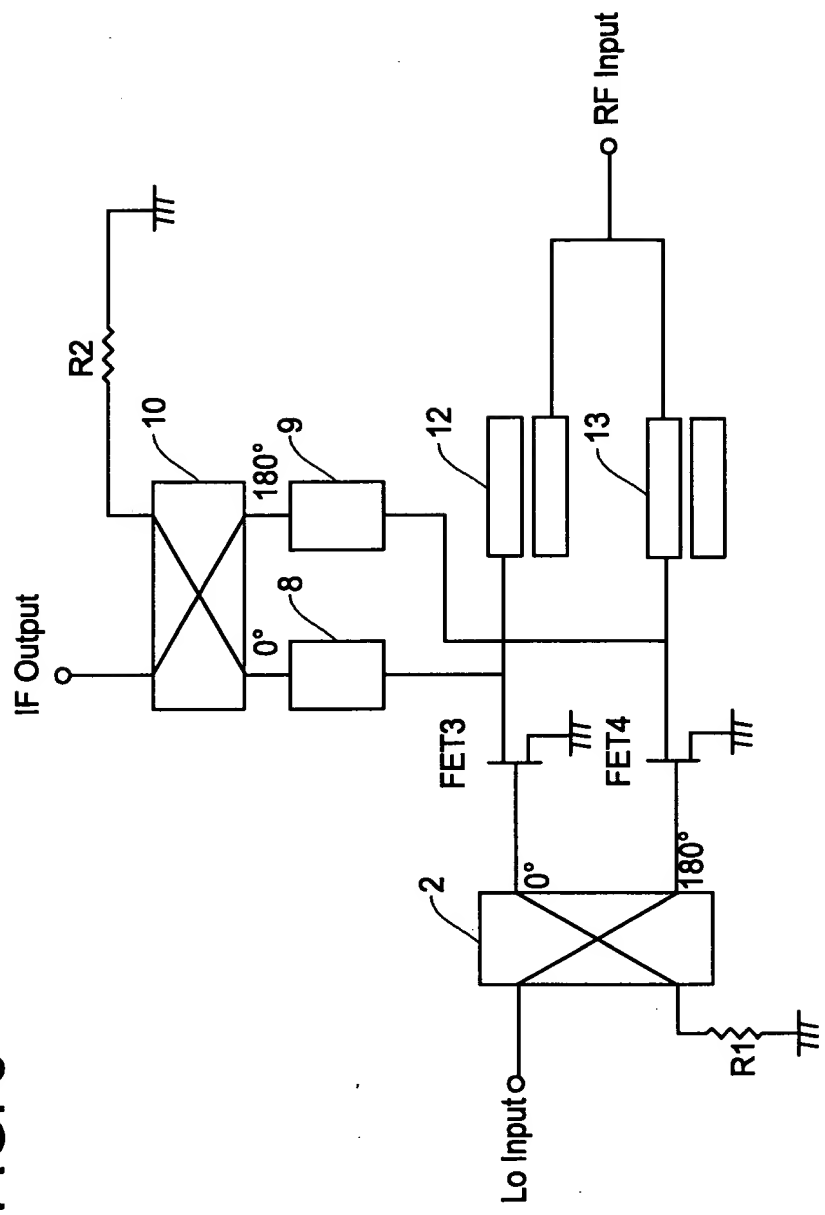


FIG. 6

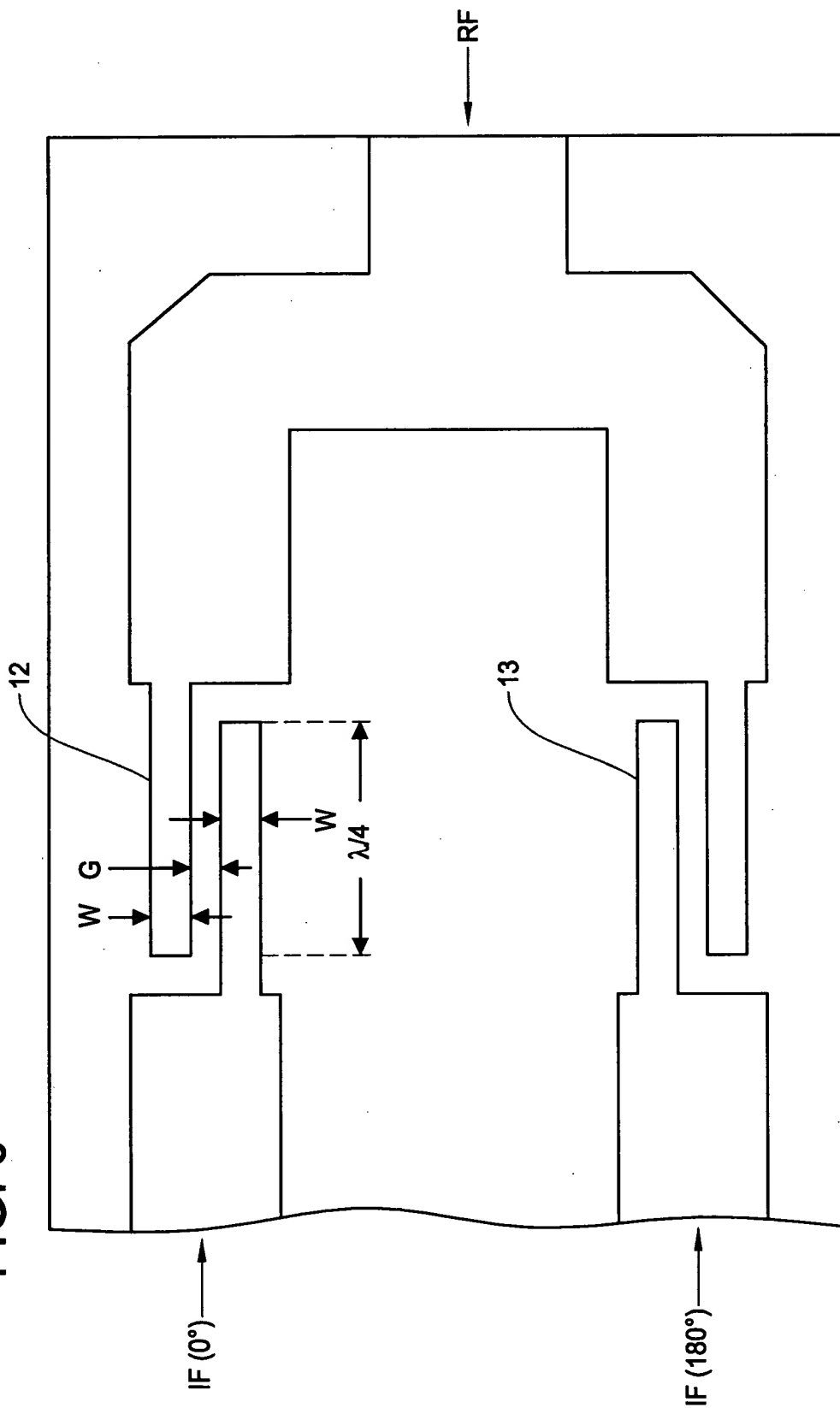
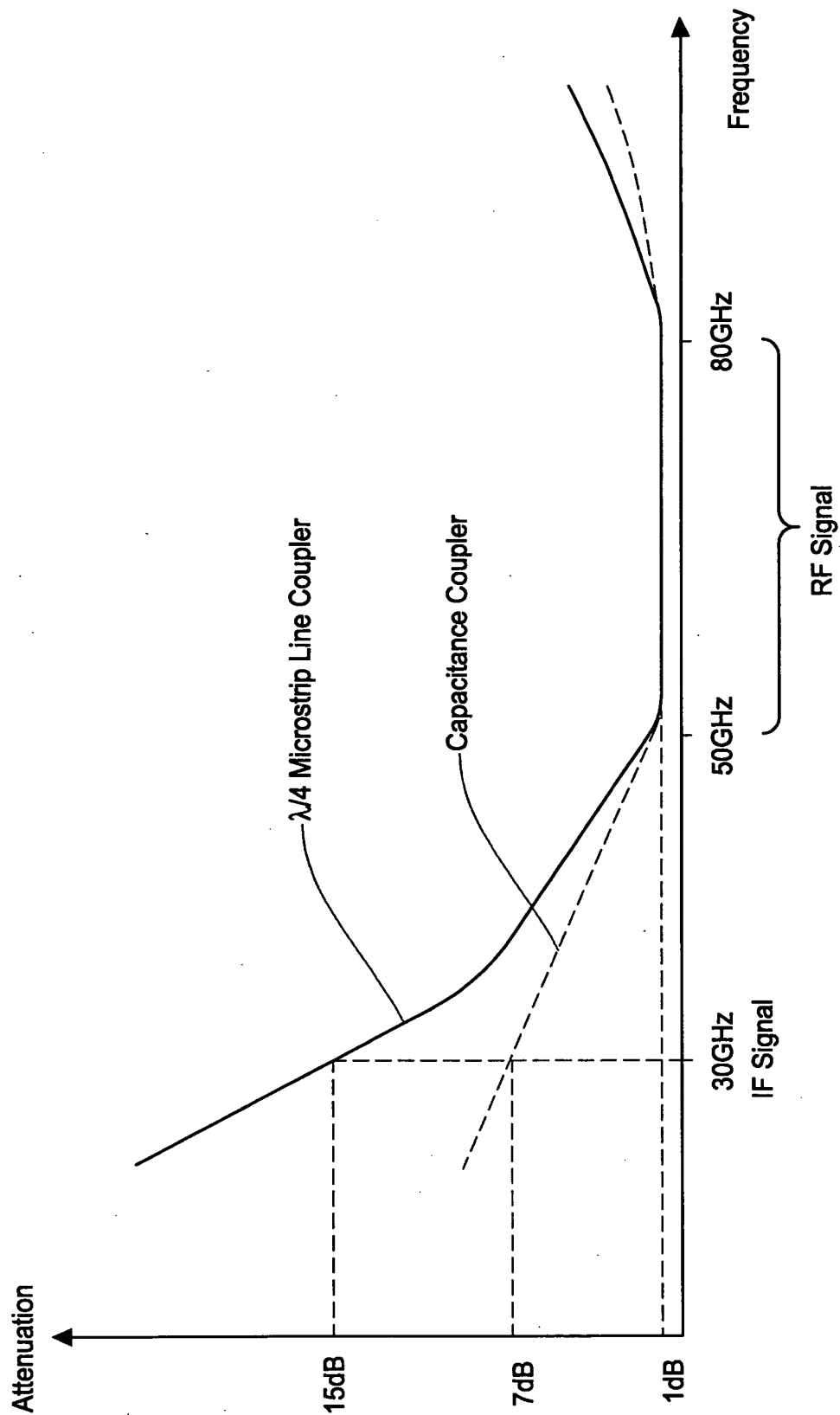


FIG. 7



TOP SECRET